APPLICATION FOR BENEFICIAL WATER USE PERMIT
HYDROGEOLOGIC ASSESSMENT REPORT ADDENDUM

§ 85-2-361, MCA
ARM 36.12.120

This addendum must be completed and the required information attached to a permit application if the point of diversion is located within a basin closure area. This information must be provided by a person qualified under § 85-2-361(2).

Attachments must be labeled as shown in the sections below (i.e: HRA.3.a). If a section is not applicable, label the section as Not Applicable or NA.

Prepared By: _____ Title: _____

I am a ☐ Hydrogeologist ☐ Qualified Scientist – Specify _____
☐ Qualified Licensed Professional Engineer

Section 1. Area of Effect

HRA.1.a What is the source aquifer? _____

HRA.1.b Is the area of groundwater that will be affected by the proposed use smaller than the limits of the aquifer? If so, explain.

_____

_____

HRA.1.c What surface waters will potentially be affected? Include surface waters specified under § 85-2-361(1)(a),MCA that are subject to an existing appropriation right.

_____

_____

Section 2. Geology and Parameters of the Aquifer System

HRA.2.a What geologic formation is the proposed well completed in?

_____

_____

HRA.2.b Parameters of the aquifer system.

HRA.2.b.1 What is the lateral extent and thickness of the aquifer? _____

_____

HRA.2.b.2 The aquifer is: ☐ confined or ☐ unconfined

HRA.2.b.3 What is the effective hydraulic conductivity of the aquifer? _____

HRA.2.b.4 What is the transmissivity of the source aquifer? _____

HRA.2.b.5 What is the storage coefficient of the source aquifer? _____

HRA.2.b.6 What is the flow direction of ground water and rate of movement? _____

_____

Section 3. Beneficial Use and Potentially Affected Water Rights

HRA.3.a ☐ Yes ☐ No Is the proposed amount to be diverted similar to the amount diverted for other beneficial uses like the proposed use? If not, explain.

_____

_____

HRA.3.b What evidence do you have that water is physically available for the proposed use?

_____

_____

Section 4. Net Depletion Analysis

HRA.4.a The volume of net depletion resulting from the proposed use is:

☐ Volume diverted
☐ Volume consumed
☐ Other

Explain your answer: _____

_____

HRA.4.b The timing of net depletion resulting from the proposed use is:

☐ Constant year-round
☐ Equal to the timing of withdrawal
☐ Other

Explain your answer: _____

_____

HRA.4.c ☐ Yes ☐ No Will net depletion, if any, result in adverse effect?

HRA.4.d ☐ Yes ☐ No Does the proposed use include wastewater treatment?

If yes, describe. _____

_____

_____

HRA.4.e How much conveyance loss will occur from the proposed project? _____

Describe how this amount was determined. Include information about the distribution and storage system. _____

_____

HRA.4.f The volume of return flow from the proposed use is:

☐ The volume diverted minus the volume consumed
☐ Other

Explain your answer: _____

_____

HRA.4.g The timing of return flows resulting from the proposed use is:

- ☐ Constant year-round
- ☐ Immediate
- ☐ Other

Explain your answer: _____

_____

HRA.4.h The location of return flows:

- ☐ The potentially affected surface waters identified in HRA.1.c
- ☐ Other

Explain your answer: _____

_____

Section 5. Water Quality Report

HRA.5.a ☐ Yes ☐ No Are there existing documented hazards that could be affected or exacerbated by the proposed project, such as areas of subsidence? If so, describe a plan to mitigate any of those conditions or impacts. _____

_____

_____

HRA.5.b ☐ Yes ☐ No Have any water quality permits been issued for this project? If so, attach copies of any to this report.

NOTE: Information required for the hydrogeologic assessment may not be sufficient to meet applicable criteria under 85-2-311, MCA, including but not limited to adverse effect to a prior appropriator. The applicant for a beneficial water use permit pursuant to 85-2-311, MCA, is responsible for providing sufficient evidence to meet all applicable criteria.